

IN THE SPECIFICATION

Please replace the existing Sequence Listing, with the attached Substitute Sequence Listing.

Please replace the paragraph beginning on page 21, line 14, with the following replacement paragraph:

The invention very advantageously relates to polypeptides of cyanophage S-2L with at least 7 amino acids and having an adenylosuccinate synthetase activity. Preferably, such fragments include the GSTGKG (SEQ ID NO: 528) unit. Moreover biological results (specific metabolism of cyanophage S-2L capable of synthesizing and polymerizing DNA incorporating D-bases), the inventors in fact identified consensus sites in particular the zones which are the phosphate and IMP binding sites. In particular the fragment QYGSTGKG (SEQ ID NO: 529) is found, which is close to the Prosite signature QWGDEGKG (SEQ ID NO: 530) attributed to adenylosuccinate synthetase, or the fragment GSTGKG (SEQ ID NO: 528) close to the fragment GDEGKG (SEQ ID NO: 531) which is common to *Escherichia coli*, *Methanobacterium thermoautotrophicum*, *Pyrococcus horikoshii* OT3. The inventors identified significant homologies for adenylosuccinate synthetase, helicase, sigma factor activities, these three activities being a priori closely and directly linked with the specific metabolism of the D-bases.